

# THE SENTINEL



OFFICIAL SAFETY NEWSLETTER OF CIVIL AIR PATROL

## Operational Risk Management

This month, my *Sentinel* article is devoted to Operational Risk Management (ORM). This synopsis will provide an overview of the process, a description of the steps and how informed risk decisions can make our organization safer, more effective and mission capable.

**- What is ORM?** It's a logic-based, common sense approach to making calculated decisions on human, material and environmental factors associated with any type of activity. Simply put, it's a methodical, six-step process to manage inherent risk.

**- Why ORM?** Since risk has always been present on planet Earth, mankind has always dealt with those risks through intuition and memories of past experiences. Success, using this method, has always been, and will continue to be, hit and miss. The ORM process allows systematic decision-making that manages risk as part of the whole operation, reduces mishaps and improves the cost-benefit ratio by lowering risk. The end result is that we are safer, our resources are conserved and our operational capability is optimized.

**- How do you do it?** Step by step.

Here's the process:

**1. Identify the hazards:** A hazard is simply a condition that could cause loss. Hazards give no indication of its mission significance. Focus on what is at risk and list potential hazards.

**2. Assess the risks:** Here, we examine each hazard and determine the exposure, severity and the mishap probability associated with our activity. This allows us to prioritize the hazards and work on the worst one first. After a hazard is analyzed, the risk can be established. Managers want to deal in risk rather than hazards because hazards do not have an explicit mission connection.

**3. Analyze risk control measures:** Determine which risks can be eliminated, reduced or controlled in some manner. If you did the previous step correctly, you'll know which one to concentrate on first. A risk control must change the risk by impacting the exposure, severity or the probability of a mishap. Controls usually cost something in terms of an investment of time or money. Prioritize these control measures to get the most "bang for your buck".



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4. Make control decisions: This step involves two actions. First, select the best possible risk controls. Next, decide if those controls will assure that the benefits will outweigh the costs. This decision making process should involve the right person making the decision at the right time, based on the right inputs. Who's the right person? Whoever has the best grasp of the risk and the opportunity issues. The organizational leaders should push the average risk decision down the chain of command over time because the detail and understanding of the decision implications increases the closer you get to the principle participants of an activity. (However, this only works if the leaders at the lower levels have grasped the overall implications of ORM.) Don't think that just because risk is present, you should avoid the activity -- if you do, you'll head towards eventual defeat. Always go for the risk when total benefits outweigh total costs. Always reject the risk when total costs outweigh total benefits. What is the difference between a bold, prudent, decisive risk and a gamble? Information and the process used to make the decision -- ORM.

5. Risk control implementation: The key here is for the risk controls to truly be

integrated within the plans, processes and operations with which they are associated. Without integration, it won't be nearly as effective. For the controls to be successful, the implementation must be clear to everyone, there must be accountability and leadership must provide support.

6. Supervise and review: When risk controls are properly integrated, the supervision of them is just like any other leadership action -- this is the prime reason for the emphasis on completely integrating the risk controls. Review is the systematic measurement of whether or not the benefit was worth the cost. This is the management aspect of ORM. That's it in a nutshell. ORM is action oriented and, because most of us have never done it before, we need to proceed systematically. Integrating these six steps into your activity planning can pay big dividends. Give it a try! If you would like to know more about this process, download the ORM tutorial in the Safety section of the CAP web site at: <http://level2.cap.gov/visitors/programs/safety/orm.cfm>

Lyle E. Letteer, Col, CAP  
National Safety Officer

## Summary of Form 78 Accidents and Incidents Received for January 2008

### **Aircraft**

Smoke in cockpit, emergency declared; safely landed. Carburetor fire on engine start.

### **Vehicle**

CAP vehicle rear-ended by civilian POV.

## The Flight Release Officer

Accident investigations often reveal a break in more than one link of the safety chain. An important link in that chain for CAP flight operations is the Flight Release Officer. This role should not be confused with a flight dispatcher, who is legally licensed for the release of commercial aviation flights. Our FRO is a link in CAP's safety efforts to verify that you, the pilot, are ready to fly and meet all CAP requirements before conducting CAP flight activities. Only flights released under these procedures are authorized CAP flight activities.

Individuals considered for approval as FROs must meet certain minimum requirements as outlined in CAPR 60-1, chapter 4. In addition to meeting those requirements and passing the FRO test, the FRO must fully understand that they are responsible for authorizing a pilot to fly as pilot-in-command on CAP activities.

The FRO is expected to use his/her best efforts to verify appropriate information prior to giving a flight release, including reliance on that verbally provided by the CAP pilot requesting the flight release. Again, I will emphasize that the FRO is not a dispatcher and is not responsible for the actual conduct of the flight. That responsibility remains with the PIC.

The FRO, however, does have a responsibility to not release a flight should the FRO believe that pilot or situational issues do not make for a safe operation. This is where an FRO's assertive skills become an important safety factor. The FRO must realize that they have the responsibility, regardless the qualification or position of the pilot requesting the release, to make the release/no-release decision.

Some other additional thoughts to include in the flight release process, that

may not be clearly defined or stated in the regulations, can be the reasonable time between releasing the flight and the pilot contacting the FRO for the release. I had a pilot contact me for a release. We went through the FRO checklist and the "IM SAFE" card and as I was completing the final log documentation for the time of departure he replied 1500 hrs. The current time was 0900 hrs. When I question why he was asking for the release 6 hours early he commented he wanted to get it out of the way and that was the way he always did it. My response was call me back before you are actually ready to fly and this is not how we are going to do it anymore; release denied.

Another question that I believe should be part of the checklist "did you contact an FRO prior to this contact and were you denied the release?" It has been an actual safety issue in the Emergency Medical Helicopter industry that when a hospital dispatch requested a medical flight from an outside vendor and the first contact decided not to conduct the flight for safety issues, the hospital dispatcher would continue calling other vendors until one did accept the flight. The accident investigation revealed that the accident flight usually did not know that other helicopter operators declined the flight for safety reasons. This practice has been deemed by the EMS helicopter industry as unsafe and that hospital dispatchers need to disclose this information. Not a bad practice for our FROs.

For more information and important reading for one of the safety links in the safety chain you should become familiar with CAPR 60-1, and the attachment 8. Excellent information!

Larry Mattiello, Lt Col, CAP Assistant  
National Safety Officer

## Operation CAPSAFE

**Operation CAPSafe** is the Safety Department's tool for receiving safety input from the CAP membership nationwide. Congratulations to the following CAP members for their February 2008 suggestions:

### Best Air Ops Suggestion

**Weight and Balance.** Some of the equipment required to be on CAP aircraft can be quite heavy. There are times when we must leave some of that equipment on the ground. Additionally, some of this equipment may "fly" in the storage compartment. It would be a good idea to mark all equipment above a certain weight. Some people can look at a chain and guess its weight, but others cannot. It would be a good idea if someone examined the cargo area of each plane and find a good, fast, secure and uniform way of securing its contents and then identifying the weight so the pilot will know. Each squadron should weigh the gear before doing a weight and

balance. I am not a pilot, but my experience with CAP has been to have only flown with very professional and experienced pilots who ask the hard questions and don't take chances. You can never know too much about your aircraft and cargo.

2nd Lt Michael Tompkins, NER-MA-067

### Best Ground Ops Suggestion

**Guy Wires.** When setting up tents, antenna masts or anything requiring guy wires, ALWAYS put red surveyors tape, yellow caution tape or other obvious flagging anywhere that guy wires, antenna wires or other obstructions may be. A strip of this stuff about 2-3 feet long can be easily seen where the wires or ropes are often difficult to see. This will help prevent injury and/or damage to equipment.

Lt. Col. Bill Croghan, PCR-NV-065

Visit [www.cap.gov/safety](http://www.cap.gov/safety) for further details on Operation CAPSafe.

## Fit to Fly

"Fit to fly" is one of those terms pilots and aircrews have heard from day one. Don't fly with an illness, don't fly while taking medications, fatigued, sleep deprived... In short, don't fly unless you are 100% up to the task. Do we all live by those rules? I like to think we try our best. We try because we're professional and we know others depend on us to make the right decision at the right time.

Completing the mission safely means being honest with ourselves. We need to assess our state of mind and body prior to getting into the aircraft by using

IMSAFE. Think of it as pre-flight for ourselves before we even look at the aircraft. Here are a few areas that deserve a close look:

- **DIET** – A balanced diet will do wonders to keep the body and mind performing at its optimum. Did you ensure that you didn't skip meals in order to press on with the mission? That donut or energy bar and coffee you substituted for a meal will give you a feeling of satisfaction for about as long as it takes to consume it to about the time the

mission begins. Your blood sugar then drops leaving you with a deficit that will affect your decision making.

- STATE OF MIND – If you are pre-occupied with anything but the task at hand, you're already way behind the power curve. Grief, depression, or anger can cause forgetfulness, irritability, indifference and even physical pain. If any of these (hopefully temporary) conditions exist, maybe a no-go decision is in order.

- FATIGUE – There are two types of fatigue, acute and chronic. Each can cause forgetfulness and difficulty in concentrating, which may lead to poor decision making. Something as simple as missing a full night's sleep can cause acute fatigue. The cure for this is easy; get some quality rest prior to the mission.

Chronic fatigue is not so easy to deal with. Too many things have conspired over a period of time to rob you of the alertness you need for the mission. Interrupted sleep patterns, improper diet, lack of exercise, worry (the list goes on) can wear you down. A good night's sleep may not be enough. The cure for chronic fatigue is time. A vacation is a great way to put the world on hold and feel good about yourself, again.

So, take care of that human machine, feed it properly, be honest with what's going on inside and give it plenty of rest. Those who depend on you will know you have given yourself a good pre-flight.

Doug Anderson, SM, CAP  
Squadron 13, CAWG